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24267   7590   06/22/2009

CESARI AND MCKENNA, LLP
88 BLACK FALCON AVENUE
BOSTON, MA 02210

EXAMINER
LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
2419	

DATE MAILED: 06/22/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,702	09/27/2001	Claudio Desanti	112025-0461	2884

TITLE OF INVENTION: SYSTEM AND METHOD FOR MAPPING AN INDEX INTO AN IPV6 ADDRESS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$0	$0	$1510	09/22/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

24267   7590   06/22/2009

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88 BLACK FALCON AVENUE
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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,702	09/27/2001	Claudio Desanti	112025-0461	2884

TITLE OF INVENTION: SYSTEM AND METHOD FOR MAPPING AN INDEX INTO AN IPV6 ADDRESS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$0	$0	$1510	09/22/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEE, ANDREW CHUNG CHEUNG	2419	370-389000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
2419	

DATE MAILED: 06/22/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 787 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 787 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	09/964,702	DESANTI ET AL.
	Examiner	Art Unit
	Andrew C. Lee	2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendment dated 4/27/2009.*

2. ☒ The allowed claim(s) is/are *1,3-13,14,15,16,17,18,19,21,22,23,24,26,27,28,29,30,32,33 renumbered 1 - 29.*

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

      a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

          1. ☐ Certified copies of the priority documents have been received.

          2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

          3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

     * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Andrew C Lee/	/Ayaz R. Sheikh/
Examiner, Art Unit 2419	Supervisory Patent Examiner, Art Unit 2419

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the

changes and/or additions be unacceptable to applicant, an amendment may be

filed as provided by 37 CFR 1.312. To ensure consideration of such an

amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone

interview with Mr. James A. Blanchette on 6/16/2009.

2.   The application has been amended as follows:

1. (CURRENTLY AMENDED) A method for use by an intermediate network

device having a plurality of interfaces for forwarding network packets among the

interfaces, one or more of the interfaces being associated with one or more

Virtual Local Area Network (VLAN) designations, the method comprising the

steps of:

mapping, by a routing processor, each VLAN designation to a an Internet

Protocol version 6 (IPv6) site identifier in a table;

receiving, on an inbound interface, a packet having a an IPv6 site-local

unicast destination address in a field of a header;

identifying the VLAN designation associated with the received packet;

utilizing the identified VLAN designation to retrieve the IPv6 site identifier

to which the VLAN designation is mapped;

creating a modified destination address by embedding the retrieved IPv6

site identifier into the IPv6 site-local unicast destination address; and

rendering a forwarding decision for the received packet based on the

modified destination address.

2. (CANCELLED)

4. (CURRENTLY AMENDED) The method of claim 3 wherein the packet further includes an IPv6 site-local unicast source address, the method further comprising the steps of:

identifying the VLAN designation associated with the outbound interface from which the packet is to be forwarded or the VLAN designation with which the packet is to be tagged;

utilizing the identified VLAN designation for the outbound interface to retrieve the IPv6 site identifier to which the VLAN designation is mapped; and

comparing the IPv6 site identifier associated with the inbound interface with the IPv6 site identifier associated with the outbound interface.

5. (CURRENTLY AMENDED) The method of claim 4 further comprising the steps of:

if, as a result of the comparing step, the two IPv6 site identifiers match, forwarding the packet on the outbound interface; and

if, as a result of the comparing step, the two IPv6 site identifiers do not match, dropping the packet without forwarding.

8. (CURRENTLY AMENDED) The method of claim 7 wherein the one or more CAMs and/or TCAMs stores addresses or address prefixes that have been modified to include IPv6 site identifiers embedded therein.

10. (CURRENTLY AMENDED) The method of claim 1 wherein

~~The received packet complies with version 6 of the Internet Protocol (IPv6),~~

the IPv6 site-local unicast address has one or more areas set to null, and

the IPv6 site identifier is embedded at a selected null area of the address.

11. (CURRENTLY AMENDED) The method of claim 1 whereby each VLAN designation is mapped to a single IPv6 site identifier.

12. (CURRENTLY AMENDED) The method of claim 11 whereby a plurality of VLAN designations are mapped to the same IPv6 site identifier.

14. (CURRENTLY AMENDED) A method for use by an intermediate network device having a plurality of interfaces for forwarding network packets among the interfaces, one or more of the interfaces being associated with one or more Virtual Local Area Network (VLAN) designations, the method comprising the steps of:

    mapping, by a routing processor, each VLAN designation to a an Internet Protocol version 6 (IPv6) site identifier in a table;

    receiving on an inbound interface a packet having a an IPv6 site-local unicast destination address in a field of a header;

    identifying the VLAN designation associated with the received packet;

    utilizing the identified VLAN designation to retrieve the IPv6 site identifier to which the VLAN designation is mapped; and

    creating a modified destination address by embedding the retrieved IPv6 site identifier into the IPv6 site-local unicast destination address.

15. (CURRENTLY AMENDED) The method of claim 14 wherein the packet further includes a an IPv6 site-local unicast source address, the method further comprising the steps of:

    identifying the VLAN designation associated with the outbound interface from which the packet is to be forwarded or the VLAN designation with which the packet is to be tagged;

    utilizing the identified VLAN designation for the outbound interface to retrieve the IPv6 site identifier to which the VLAN designation is mapped; and

comparing the IPv6 site identifier associated with the inbound interface with the IPv6 site identifier associated with the outbound interface.

16. (CURRENTLY AMENDED) The method of claim 15 further comprising the steps of:

if, as a result of the comparing step, the two IPv6 site identifiers match, forward-ing the packet on the outbound interface; and

if, as a result of the comparing step, the two IPv6 site identifiers do not match, dropping the packet without forwarding.

17. (CURRENTLY AMENDED) An intermediate network device for forwarding packets within a computer network, the device comprising:

a plurality of interfaces for receiving and forwarding packets, one or more of the interfaces associated with one or more virtual local area network (VLAN) designations;

a forwarding information base (FIB) for storing routing information;

a routing engine in communicating relationship with the FIB, the routing engine configured to make forwarding decisions for received packets, based at least in part on the routing information in the FIB; and

a memory in communicating relationship with the routing engine, the memory configured to store the VLAN designations associated with the device's interfaces in mapping relationship with one or more Internet Protocol version 6 (IPv6) site identifiers,

wherein the routing engine identifies the VLAN designation associated with the received packet, utilizes the identified VLAN designation to retrieve the IPv6 site identifier to which the VLAN designation is mapped, and creates a modified destination ad-dress by embedding the retrieved IPv6 site identifier into an IPv6 site-local unicast destination address, and

wherein the routing engine utilizes the memory to ensure that a packet having an IPv6 site-local unicast source and/or destination address is only forwarded between inter-faces corresponding to the same IPv6 site identifier.

20. (CANCELLED)

21. (CURRENTLY AMENDED) The intermediate network device of claim ~~20~~ 17 wherein the routing engine:

~~identifies the VLAN designation associated with the received packet,~~ ~~utilizes the identified VLAN designation to retrieve the site identifier to which the~~ ~~VLAN designation is mapped,~~ ~~creates a modified destination address by embedding the retrieved site identifier~~ ~~into the site-local unicast destination address, and~~

renders a forwarding decision for the received packet based on the modified destination address.

22. (CURRENTLY AMENDED) The intermediate network device of claim 21 wherein the routing engine prevents packets received on an inbound interface that corresponds to a first IPv6 site identifier from being forwarded on an outbound interface that corresponds to a second IPv6 site identifier.

24. (CURRENTLY AMENDED) A method for use by an intermediate network device having a plurality of interfaces for forwarding network packets among the interfaces, one or more of the interfaces being associated with one or more Virtual Local Area Network (VLAN) designations, the method comprising the steps of:

receiving on an inbound interface a packet having ~~a~~ an Internet Protocol version 6 (IPv6) link-local unicast destination address in a field of a header;

identifying the VLAN designation associated with the received packet;

creating a modified destination address by embedding the identified VLAN
designation into the IPv6 link-local unicast destination address; and

rendering a forwarding decision for the received packet based on the
modified destination address.

25. (CANCELLED)

26. (CURRENTLY AMENDED) The method of claim 25 24 wherein the step of
rendering a forwarding decision comprises the step of deciding upon an
outbound interface from which the packet is to be forwarded.

30. (CURRENTLY AMENDED) An intermediate network device for forwarding
packets within a computer network, the intermediate device comprising:

means for mapping, by a routing processor, one or more VLAN
designations to a an Internet Protocol version 6 (IPv6) site identifier in a table;

means for receiving a packet having a an IPv6 site-local unicast
destination address in a field of a header;

means for identifying a particular VLAN designation associated with the
received packet;

means for retrieving the IPv6 site identifier to which the particular VLAN
designation is mapped;

means for creating a modified destination address by embedding the
retrieved IPv6 site identifier into the IPv6 site-local unicast destination address;
and

means for rendering a forwarding decision for the received packet based
on the modified destination address.

31. (CANCELLED)

32. (CURRENTLY AMENDED) A computer readable medium containing computer-executable program instructions for forwarding packets within a computer network, the computer-executable program instructions comprising computer-executable program instructions configured to:

map, by a routing processor, one or more VLAN designations to a an Internet Protocol version 6 (IPv6) site identifier in a table;

identify a particular VLAN designation associated with a received packet that has a an IPv6 site-local unicast destination address in a field of a header;

retrieve the IPv6 site identifier to which the particular VLAN designation is mapped;

create a modified destination address by embedding the retrieved IPv6 site identifier into the IPv6 site-local unicast destination address; and

render a forwarding decision for the received packet based on the modified destination address.

33. (CURRENTLY AMENDED) An apparatus comprising:

a plurality of interfaces configured to receive and forward packets, one or more of the interfaces associated with one or more virtual local area network (VLAN) designations;

a forwarding information base (FIB) configured to store routing information;

a routing engine in communicating relationship with the FIB, the routing engine configured to make forwarding decisions for received packets, based at least in part on the routing information in the FIB; and

a memory in communicating relationship with the routing engine, the memory configured to store the VLAN designations associated with the device's interfaces in mapping relationship with one or more Internet Protocol version 6 (IPv6) site identifiers,

wherein the routing engine is further configured to, in response to receipt of a packet on an inbound interface having a an IPv6 site-local unicast

destination address in a field of a header, identify a VLAN designation associated
with an outbound interface from which the packet is to be forwarded, utilize the
identified VLAN designation for the outbound interface to retrieve a ~~an IPv6~~ site
identifier to which the VLAN designation is mapped, creating a modified
destination address by embedding the retrieved IPv6 site identifier into the IPv6
site-local unicast destination address, compare an IPv6 site identifier associated
with an inbound interface with the IPv6 site identifier associated with the
outbound interface, and if the two IPv6 site identifiers match, forward the packet
on the outbound interface, and if the two IPv6 site identifiers do not match, drop
the packet without forwarding.

34. (CANCELLED)

REASONS FOR ALLOWANCE

3.   The following is an examiner's statement of reasons for allowance:

        Prior art of record, in single or in combination, fails to disclose explicitly the
limitations of:

        "identifying the VLAN designation associated with the received packet;
utilizing the identified VLAN designation to retrieve the IPv6 site identifier to
which the VLAN designation is mapped; creating a modified destination address
by embedding the retrieved IPv6 site identifier into the IPv6 site-local unicast
destination address; and   rendering a forwarding decision for the received
packet based on the modified destination address" as disclosed in claim 1;

        "identifying the VLAN designation associated with the received packet;
utilizing the identified VLAN designation to retrieve the IPv6 site identifier to
which the VLAN designation is mapped; and creating a modified destination
address by embedding the retrieved IPv6 site identifier into the IPv6 site-local
unicast destination address" as disclosed in claim 14;

"a memory in communicating relationship with the routing engine, the memory configured to store the VLAN designations associated with the device's interfaces in mapping relationship with one or more Internet Protocol version 6 (IPv6) site identifiers, wherein the routing engine identifies the VLAN designation associated with the received packet, utilizes the identified VLAN designation to retrieve the IPv6 site identifier to which the VLAN designation is mapped, and creates a modified destination ad-dress by embedding the retrieved IPv6 site identifier into an IPv6 site-local unicast destination address, and wherein the routing engine utilizes the memory to ensure that a packet having an IPv6 site-local unicast source and/or destination address is only forwarded between inter-faces corresponding to the same IPv6 site identifier" as disclosed in claim 17;

"receiving on an inbound interface a packet having a an Internet Protocol version 6 (IPv6) link-local unicast destination address in a field of a header; identifying the VLAN designation associated with the received packet; creating a modified destination address by embedding the identified VLAN designation into the IPv6 link-local unicast destination address; and rendering a forwarding decision for the received packet based on the modified destination address" as disclosed in claim 24;

"means for receiving a packet having a an IPv6 site-local unicast destination address in a field of a header; means for identifying a particular VLAN designation associated with the received packet; means for retrieving the IPv6 site identifier to which the particular VLAN designation is mapped; means for creating a modified destination address by embedding the retrieved IPv6 site identifier into the IPv6 site-local unicast destination address; and means for rendering a forwarding decision for the received packet based on the modified destination address" as disclosed in claim 30;

"identify a particular VLAN designation associated with a received packet that has a an IPv6 site-local unicast destination address in a field of a header; retrieve the IPv6 site identifier to which the particular VLAN designation is mapped; create a modified destination address by embedding the retrieved IPv6

site identifier into the IPv6 site-local unicast destination address; and render a
forwarding decision for the received packet based on the modified destination
address" as disclosed in claim 32;

   "a memory in communicating relationship with the routing engine, the
memory configured to store the VLAN designations associated with the device's
interfaces in mapping relationship with one or more Internet Protocol version 6
(IPv6) site identifiers, wherein the routing engine is further configured to, in
response to receipt of a packet on an inbound interface having a an IPv6 site-
local unicast destination address in a field of a header, identify a VLAN
designation associated with an outbound interface from which the packet is to be
forwarded, utilize the identified VLAN designation for the outbound interface to
retrieve a an IPv6 site identifier to which the VLAN designation is mapped,
creating a modified destination address by embedding the retrieved IPv6 site
identifier into the IPv6 site-local unicast destination address, compare an IPv6
site identifier associated with an inbound interface with the IPv6 site identifier
associated with the outbound interface, and if the two IPv6 site identifiers match,
forward the packet on the outbound interface, and if the two IPv6 site identifiers
do not match, drop the packet without forwarding" as disclosed in claim 33.

4. Additionally, all of the further limitations in claims 3, 4, 5, 6, 7, 8, 9, 10, 11,

12, 13, 15, 16, 18, 19, 21, 22, 23, 26, 27, 28, 29 are allowable since the claims

are dependent upon the independent claims.

5. Any comments considered necessary by applicant must be submitted no

later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled

"Comments on Statement of Reasons for Allowance."

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<6/17/2009::3Qy09>
/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2419